Listing of Claims

Please amend claims 1, 8, 13, 18-25, 28, 32, 33, 37, 40 as shown below. Please cancel claim 7.

This listing of claims will replace all prior versions of claims and listings of claims in the application:

1. (currently amended) A composite coated wood construction product comprising:

a wood-based substrate; and

a composite layer coating a surface of the wood-based substrate,

wherein the composite layer includes a polymer and an organic filler, wherein the organic filler is at least one of saw dust, wood flour, wood fibers, by-products of paper manufacturing, and recycled cellulosics.

2. (original) A composite coated wood construction product according to claim 1, wherein the wood construction product is a structural wood construction product.

3. (original) A composite coated wood construction product according to claim 1, wherein the composite layer encapsulates the wood-based substrate.

4. (original) A composite coated wood construction product according to claim 1, wherein the composite layer further includes an inorganic filler.

5. (original) A composite coated wood construction product according to claim 4, wherein the inorganic filler is at least one of talc, calcium, mica, clay, nanocomposite material, and flyash.

6. (original) A composite coated wood construction product according to claim 4, wherein a combination of all inorganic fillers is substantially between 5% and 35% by weight of the composite layer.

7. (cancelled)

8. (currently amended) A composite coated wood construction product according to claim 13 ~~1~~, wherein the organic filler is an agro-fiber.

9. (original) A composite coated wood construction product according to claim 8, wherein the agro-fiber is one of rice hulls, wheat shaft, flax, sugar cane, peanut shells, kenaf, and coconut shells.

10. (original) A composite coated wood construction product according to claim 1, wherein a combination of all organic fillers is substantially between 20% and 80% by weight of the composite layer.

11. (original) A composite coated wood construction product according to claim 10, wherein the combination of all organic fillers is substantially between 30% and 60% by weight of the composite layer.

12. (original) A composite coated wood construction product according to claim 1, wherein the polymer includes at least one of polyethylene, polypropylene, polystyrene, ABS, polyvinyl chloride, and polyester.

13. (currently amended) A composite coated wood construction product comprising:

a wood-based substrate; and

a composite layer coating a surface of the wood-based substrate,

wherein the composite layer includes a polymer and an organic filler ~~according to claim 1~~, wherein the composite layer is foamed.

14. (original) A composite coated wood construction product according to claim 13, wherein the composite layer includes a chemical blowing agent.

15. (original) A composite coated wood construction product according to claim 13, wherein the composite layer includes a physical blowing agent.

16. (original) A composite coated wood construction product according to claim 13, wherein a foamed composite layer has substantially between 5% and 80% less weight than an unfoamed composite layer with substantially the same volume as the foamed composite layer.

17. (original) A composite coated wood construction product according to claim 16, wherein a foamed composite layer has substantially between 10% and 50% less weight than an unfoamed composite layer with substantially the same volume as the foamed composite layer.

18. (currently amended) A composite coated wood construction product according to claim 13 ~~1~~, wherein the composite layer includes an additive to increase the strength of the composite coated wood construction product.

19. (currently amended) A composite coated wood construction product according to claim 13 ~~1~~, wherein the composite layer includes at least one of a crosslinking agent, a compatibilizers, a colorant, and a processing aid.

20. (currently amended) A composite coated wood construction product according to claim 13 ~~1~~, wherein the polymer includes an interpolymer.

21. (currently amended) A composite coated wood construction product according to claim 13 ~~1~~, wherein the composite layer further includes a biocide.

22. (currently amended) A composite coated wood construction product according to claim 13 ~~1~~, wherein the wood-based substrate includes dimensional lumber.

23. (currently amended) A composite coated wood construction product according to claim 13 ~~1~~, wherein the wood-based substrate includes milled shapes.

24. (currently amended) A composite coated wood construction product according to claim 13 ~~1~~, wherein the wood-based substrate includes one of solid wood, compressed wood, and particle board.

25. (currently amended) A composite coated wood construction product according to claim 13 ~~1~~, wherein the wood-based substrate is treated with a protecting agent.

26. (currently amended) A composite coated wood construction product according to claim 13 ~~1~~ further comprises at least one additional layer.

27. (original) A composite coated wood construction product according to claim 26, wherein the at least one additional layer includes an adhesive.

28. (currently amended) A composite coated wood construction product comprising:

a wood-based substrate;

a composite layer coating a surface of the wood-based substrate; and

at least one additional layer,

wherein the composite layer includes a polymer and an organic filler, and ~~according to claim 26,~~ wherein the at least one additional layer includes a coextruded layer.

29. (currently amended) A composite coated wood construction product according to claim 28 ~~26~~, wherein the at least one additional layer is foamed.

30. (original) A composite coated wood construction product according to claim 1, wherein the composite layer is substantially between 0.005 inches and 0.500 inches thick.

31. (original) A composite coated wood construction product according to claim 1, wherein the composite layer is substantially between 0.5 inches and 3.0 inches thick.

32. (currently amended) A composite coated wood construction product comprising:

a wood-based substrate; and

a composite layer coating a surface of the wood-based substrate,

wherein the organic filler is at least one of saw dust, wood flour, wood fibers, by-products of paper manufacturing, and recycled cellulosics, and wherein the wood construction product has an exterior surface substantially the same as an exterior surface of a non-structural plastic composite.

33. (currently amended) A method of manufacturing a composite coated wood construction product comprising the steps of:

coating a surface of a wood-based substrate with a layer of a composite melt; ~~and~~

cooling the layer of composite melt; and

foaming the layer of composite melt,

wherein the composite melt includes a polymer and an organic filler.

34. (original) A method according to claim 33, wherein the step of coating further includes extruding the layer of composite melt.

35. (original) A method according to claim 34, wherein extruding the layer of composite melt includes extruding the layer of composite melt using at least one of a single screw extruder, a twin screw extruder, a tandem extruder, and a continuous mixer/extruder combination.

36. (original) A method according to claim 34, wherein the step of coating further includes feeding the composite melt into a first entrance of a cross head die; and feeding the wood-based substrate to a second entrance of the cross head die.

37. (currently amended) A method of manufacturing a composite coated wood construction product comprising the steps of:

coating a surface of a wood-based substrate with a layer of a composite melt;

cooling the layer of composite melt; and

~~according to claim 34 further comprising the step of~~

coextruding an additional layer,

wherein the composite melt includes a polymer and an organic filler.

38. (original) A method according to claim 37, wherein the additional layer is a tie layer between the layer of composite melt and the wood-based substrate.

39. (original) A method according to claim 37, wherein coextruding an additional layer includes foaming the additional layer.

40. (currently amended) A method according to claim 39 ~~33~~ further comprising the step of foaming the layer of composite melt.

41. (original) A method according to claim 33, wherein coating the surface includes altering a portion of a surface of the composite melt layer to create texture on the surface.